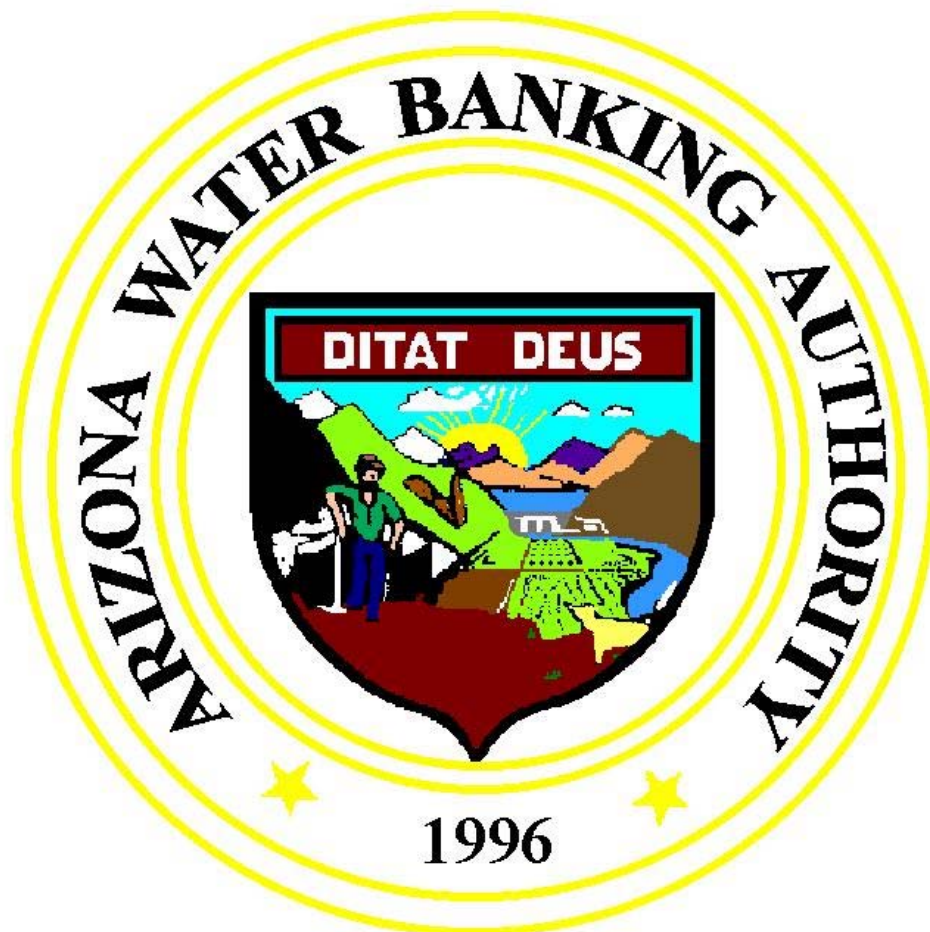


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# ARIZONA WATER BANKING AUTHORITY

## ANNUAL PLAN OF OPERATION

# 2008



Herbert R. Guenther, Chairman

December 2007

## The Arizona Water Banking Authority

### Summary

The Arizona Water Banking Authority (AWBA; Water Bank) was created in 1996 to store the unused portion of Arizona's annual allocation of the Colorado River. Until the AWBA was created, Arizona had not used its full 2.8 million acre-foot share of Colorado River water. Leaving a portion of Arizona's water in the Colorado River was a lost opportunity; the AWBA has seized this opportunity to further secure dependable water supplies necessary to ensure the state's long-term prosperity.

The Water Bank stores unused Arizona Colorado River water to meet future needs for:

- Firming (to secure) adequate water supply to municipal and industrial users in the Central Arizona Project service area and along the Colorado River in times of shortages;
- Meeting the management plan objectives of the Arizona Groundwater Code;
- Assisting in the settlement of Indian water rights claims; and
- Assisting Nevada and California through interstate water banking.

Each year, the AWBA pays the delivery and storage costs to bring Colorado River water into Central and Southern Arizona through the Central Arizona Project canal. The water is stored underground in existing aquifers (direct recharge) or is used by irrigation districts in lieu of pumping groundwater (indirect or in lieu recharge). For each acre-foot stored, the AWBA accrues credit that can be redeemed in the future when Arizona's communities or neighboring states need this backup water supply.

The money that funds the AWBA and, specifically, water storage for the benefit of Arizona (intrastate storage) comes from three sources that are either from existing revenue sources or from fees charged to those benefiting directly from the stored water. Restrictions on the ways these monies can be used depend on the source of the monies, which currently include:

- Fees for groundwater pumping currently collected within the Phoenix, Pinal and Tucson Active Management Areas (AMA). These monies can only be used to benefit the AMA in which the fees are collected.
- A four cent *ad valorem* property tax collected in the three county CAP service area. These monies can only be used to benefit the county in which the tax is levied.
- A general fund appropriation received at the discretion of the Legislature.

Another source of funding is used for water storage to aid Nevada (interstate storage) and is received pursuant to an Agreement for Interstate Water Banking.

In 2008, the Water Bank will store approximately 188,000 acre-feet for intrastate storage at a cost of \$5.8 million. Presently, there is no interstate storage planned for 2008, given the reduced water available to the AWBA.

A general fund appropriation of \$13.5 million received from the Legislature in 2006 specifies that it will be used for Indian firming. The Water Bank will spend \$1.5 million

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of this appropriation in 2008 as part of the State's obligation to the Secretary of Interior under the Arizona Water Settlements Act. The Water Bank is planning these expenditures after the enforceability date (date obligations begin) of December 31, 2007 of the Arizona Water Settlements Act.

To date, the AWBA has delivered for storage approximately 3.2 million acre-feet at a cost of \$217 million; 2.67 million acre-feet for intrastate storage at a cost of \$120 million and 518,000 acre-feet for interstate storage at a cost of \$96.4 million. In addition to water delivered by the AWBA on behalf of Nevada, 50,000 acre-feet of credits previously accrued by CAWCD were transferred to the account creating a total of 530,000 acre-feet of credits available for Nevada.

## INTRODUCTION

The Arizona Water Banking Authority (AWBA) was created to store Arizona's unused Colorado River water entitlement in western, central and southern Arizona to develop long-term storage credits to: (1) firm existing water supplies for municipal and industrial users (M&I) along the Colorado River and Central Arizona Project (CAP) M&I users during Colorado River shortages or CAP service interruptions; (2) help meet the water management objectives of the Groundwater Code; and (3) assist in the settlement of American Indian water rights claims. Changes in the AWBA's enabling legislation in 1999 authorized the AWBA to participate in other water banking activities, however, no new water banking activities are included in this annual Plan of Operation.

The AWBA's storage (or banking) of water is accomplished through the Underground Water Storage, Savings and Replenishment Act (UWS) enacted by the Arizona legislature in 1994 and administered by the Arizona Department of Water Resources (ADWR). Through this program, the AWBA stores renewable water that currently has no immediate, direct use in either underground storage (USF) or groundwater savings (GSF) facilities. A USF is a facility that allows water to physically be added to an aquifer. A GSF is a facility where the renewable water is used in place of groundwater, creating a groundwater savings. The UWS program mandates the accounting of the renewable water stored and the development of long-term storage credits. The long-term storage credits developed by the AWBA will then be utilized by the AWBA when future conditions warrant. The use of credits for the three objectives listed above may differ and is dependent on the source of funds utilized to develop them.

The AWBA is required by statute to approve an annual Plan of Operation (Plan) by January 1 of each year. Prior to approval of the final Plan, the AWBA is required to solicit public comment. This is achieved by presenting a draft of the Plan to the Groundwater Users Advisory Councils (GUAC) for the Phoenix, Pinal and Tucson Active Management Areas (AMA) and to the county board of supervisors for counties outside of the AMA's if water storage is proposed there within the Plan. Presentation of the draft Plan must be made at publicly-noticed open meetings at which members of the public are permitted to provide comment. The AWBA also accepts public comment in writing up to the time the final draft Plan is presented for approval.

The Plan is intended to govern the operations of the AWBA over the course of the entire calendar year. The AWBA recognizes that day-to-day adjustments in the normal operations of the CAP or the individual storage facilities caused by maintenance and

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fluctuations in the weather may affect the actual monthly deliveries made on behalf of the AWBA. If the adjustments do not impact the overall annual delivery projections contained in the Plan, they will not be deemed modifications to the Plan and will be addressed by staff and reported to the AWBA members on an as-needed basis.

## 2007 PLAN OF OPERATION

In 2007, the AWBA's eleventh full year of operation, the AWBA recharged approximately 388,000 acre-feet of Colorado River water and Arizona's total use of Colorado River water is forecast to be 2.77 million acre-feet (MAF) by the Bureau of Reclamation data dated December 5, 2007 (see Figure 1).

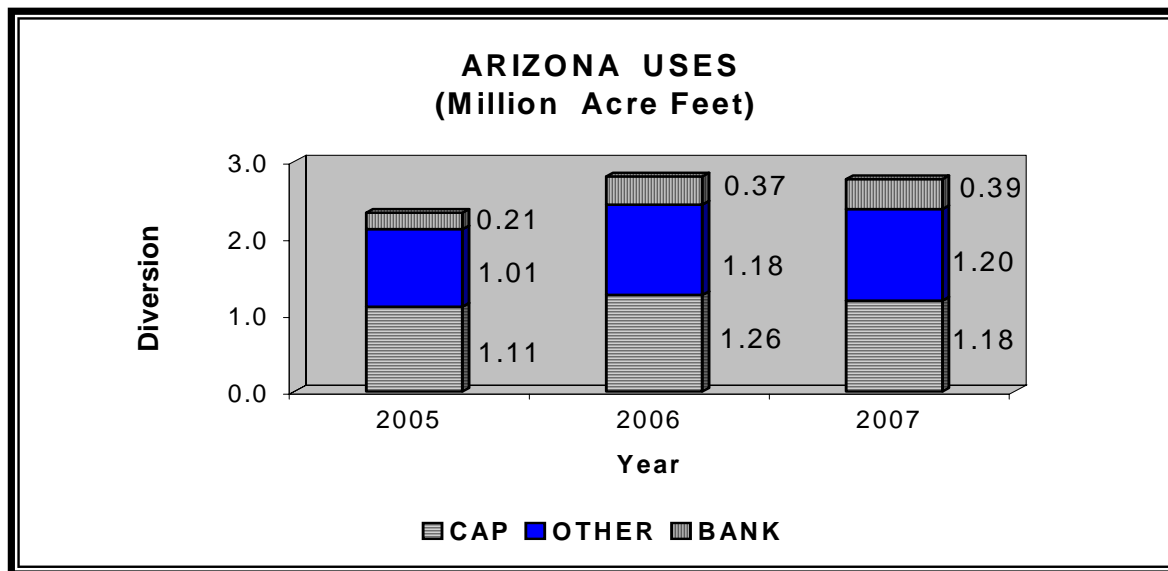


Figure 1

The Bureau of Reclamation forecasts total use of Colorado River water in the Lower Basin to be 7.44 MAF in 2007 (see Figure 2).

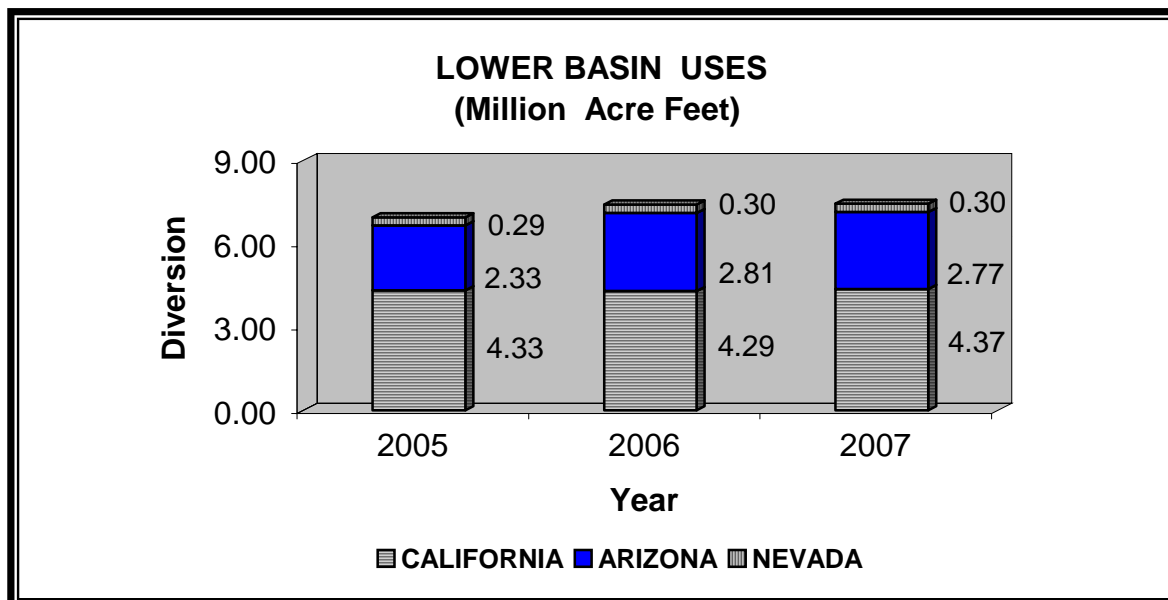


Figure 2

The AWBA recharged water at both USFs and GSFs in 2007. Table 1 lists the AWBA's recharge partners for 2007, the amount of water that can be stored under each AWBA water storage permit, and the amount of water delivered to the facility by the AWBA in 2007. Table 1 values are based on actual deliveries through November with December's deliveries estimated. The amount of water delivered to a facility is always greater than the amount of long-term storage credits earned by the AWBA because credits are computed by subtracting approximately 3-5% for losses and 5% for a "cut to the aquifer" from the total annual deliveries. Final figures for credits earned generally become available in the middle of the following year after review of the annual reports filed with the ADWR and are reported in the AWBA's Annual Report.

**Table 1**

<b>AMA</b>	<b>Facility</b>	<b>Type</b>	<b>Permit Capacity (acre-feet)</b>	<b>Amount Delivered (acre-feet)</b>
<b>Phoenix</b>	Agua Fria (CAP)	USF	100,000	6,955
	Hieroglyphic Mtn. (CAP)	USF	35,000	7,288
	Tonopah Desert (CAP)	USF	150,000	108,960
	Chandler Hts Citrus ID	GSF	3,000	170
	Queen Creek ID	GSF	28,000	9,197
	Gila River Indian IDD	GSF	37,520	15,483
<b>Pinal</b>	CAIDD	GSF	110,000	24,000
	CAIDD Interstate			39,000
	Hohokam IDD	GSF	55,000	25,000
	Hohokam Interstate			17,500
	MSIDD	GSF	120,000	23,000
	MSIDD Interstate			60,090
<b>Tucson</b>	Gila River Indian IDD	GSF	18,480	7,626
	Avra Valley (CAP)	USF	11,000	6,600
	CAVSARP	USF	60,000	14,500
	Lower Santa Cruz (CAP)	USF	50,000	12,941
<b>Total</b>			<b>819,231</b>	<b>388,310</b>

The Plan of Operation for 2007 proposed to deliver approximately 376,000 acre-feet of water with 249,000 acre-feet for intrastate deliveries and 127,000 acre-feet for interstate deliveries. In 2007, an increase in the value of agricultural commodities (small grains) created an associated increase in water demand. Due to the GSF partner's increased need for water, the AWBA was able to participate to a greater extent than originally projected, with overall deliveries 13,000 acre-feet higher than projected. The AWBA delivered approximately 388,000 acre-feet of water in 2007: 262,000 acre-feet for intrastate banking and 126,000 acre-feet for interstate banking. Figure 3 shows the acre-foot breakdown between GSFs and USFs for 2007 and a comparison between 2007 and previous years.

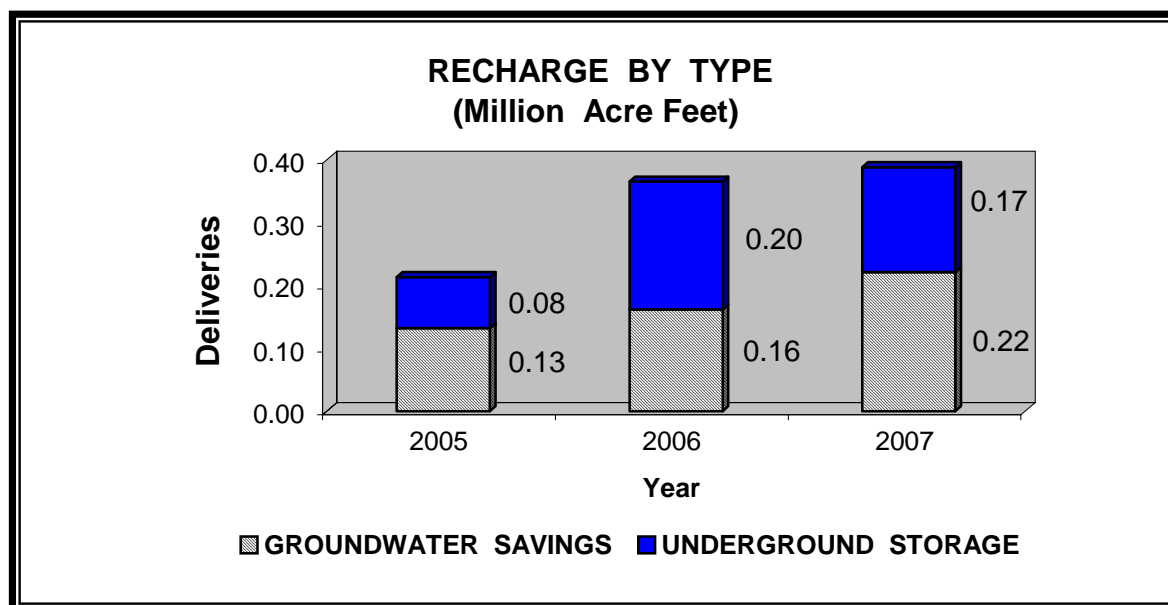


Figure 3

## 2008 PLAN OF OPERATION

For 2008, the AWBA will store approximately 188,000 acre-feet of intrastate water. Water storage will be occurring in facilities from all three counties. The AWBA is not planning any interstate storage in 2008.

When developing a Plan of Operation, the AWBA evaluates four critical factors: (1) the amount of unused water available to the AWBA for delivery; (2) the CAP capacity available to the AWBA for the delivery of unused water; (3) the funds available and the costs required to deliver the unused water; and (4) the capacity available for use by the AWBA at the various recharge facilities. In addition to these critical factors, the AWBA takes into consideration recommendations made by the Groundwater Users Advisory Councils (GUAC) of the three AMAs regarding water management objectives and priorities for storage.

### I. Water Availability

The factor of water availability consists of two parts: (1) the amount of water available on the Colorado River for diversion by the CAP within Arizona's allocation; and (2) the amount of CAP water available for delivery to the AWBA under the existing pool structure.

The Bureau of Reclamation distributed the Annual Operating Plan (AOP) for water year 2008 to the states in October of 2007. The AOP stated that the Normal Condition will govern the release of water for the states in the lower basin during calendar year 2008. Under this declaration, there are 2.8 MAF of water available for use within Arizona. Arizona's on-river use is forecast to be 1.2 MAF,

leaving approximately 1.6 MAF available for diversion by CAP. Pursuant to the agreement between the Metropolitan Water District of Southern California, CAWCD, and the AWBA, approximately 25,000 acre-feet of Intentionally Created Unused Apportionment (ICUA) would be available to California from Arizona's apportionment.

With respect to availability of CAP water, the AWBA purchases water from the category that is termed excess water. Excess water is generally recognized to be all water available for delivery through the CAP, regardless of Secretarial declaration of condition, in excess of the quantities scheduled under long-term contracts and subcontracts. The availability of excess water is determined on an annual basis. Pursuant to current CAP policy, the AWBA has available to it any water not requested by another entity within Arizona. The AWBA shares an equal priority for water for municipal and industrial (M&I) firming with the Central Arizona Groundwater Replenishment District.

For a number of reasons, the amount of CAP water available to the AWBA was the significant limiting factor in this Plan. In past years, even though there was a great deal of interest for excess water by higher priority users, sufficient excess water was typically available for the AWBA. However for 2008, preliminary water orders by CAP customers, including requests from AWBA partners, exceeded CAP's projected supply of 1.575 MAF by 225,000 acre-feet. This increase in water orders was due to several factors, such as the price of incentive recharge water at a historic low of \$51/AF, increased water demand by irrigation districts in response to the commodity markets, increased use of water allocations for M&I subcontracts, and the need for Salt River Project (SRP) to maintain water storage in Roosevelt Lake because of continuing drought and associated lack of precipitation events reducing inflow to the SRP system. Since the AWBA can only order water not requested by higher priority users, these increased requests left little water available to the AWBA. After discussions with its customers, CAP was able to reduce its orders to within available supplies. Final CAP subcontract orders were for 1.39 MAF, leaving approximately 188,000 acre-feet available for the AWBA. This is almost 200,000 acre-feet less water available to the AWBA than in 2007.

Since supplies are limited, the 2008 Plan focuses on meeting intrastate deliveries first, utilizing funds available to the AWBA (discussed below). The Plan further prioritizes intrastate deliveries by delivering water for direct use utilizing the GSFs. After meeting those direct use opportunities, the remaining water is delivered to USFs. Additionally, because of the reduced water availability, the Plan does not include delivery and storage for interstate water banking for the State of Nevada. If water becomes available, the Plan could be amended to include interstate deliveries.

## II. CAP System Capacity

Under normal operating conditions during a normal water supply year, CAP diverts approximately 1.6 million acre-feet. Although the CAP is capable of delivering approximately 180,000 acre-feet per month, the available capacity does not always total that because of unique situations, i.e. the filling of Lake Pleasant in the winter months, deliveries to the western portion of the aqueduct,

New Waddell Dam releases to the aqueduct in the summer months and scheduled maintenance and outages. The CAP 2008 Operating Plan has planned maintenance south of the Brady pumping plant in the Tucson aqueduct for three weeks in the fall of 2008. This maintenance restricts deliveries to the southern end of the canal for this time period. While this factor imposes some temporal limitation on deliveries, it was not a limiting factor in developing this Plan.

### III. Available Funds

The AWBA will have withdrawal fees collected in 2008 available for use in this Plan for intrastate storage. Withdrawal fees projected for collection in March of 2008 are \$3.4 million; of that amount, \$1.7 million is available for the Phoenix AMA, and approximately \$500,000 and \$1.2 million are available for the Tucson and Pinal AMAs, respectively. In addition, an appropriation of \$13.5 million was received by the Legislature in 2006. However, expenditure of this fund is limited to meeting the State's firming obligation under the Arizona Water Settlements Act (Settlements Act).

As in previous years, the CAWCD Board resolved to continue to retain the county *ad valorem* property taxes collected and not transfer those revenues to the AWBA Fund. Property tax revenues retained by CAWCD can be used to offset the cost of AWBA water deliveries in the tri-county CAWCD service area. The estimated *ad valorem* tax balances available for 2008, including carry over, are: Maricopa County (\$67.1 million); Pima County (\$5.7 million); and Pinal County (\$1.25 million).

Unlike other years, funding was not a limiting factor in developing the 2008 Plan. However, funding in the Pinal area did limit the amount of direct delivery. If more water was available, funding could have also been an issue for Tucson. Nonetheless, the availability of funds is expected to be a consideration in the Pinal and Tucson areas in the future.

If water becomes available later in the year, there is approximately \$13.6 million available from the Nevada agreement that could be used to supplement funding available to the AWBA to insure that Arizona's full entitlement is diverted from the Colorado River.

### IV. Available Storage Facility Capacity

AWBA staff conferred with facility operators to discuss their delivery schedules and their continued interest in participating with the AWBA. These discussions confirmed that there was significant interest in partnering with the AWBA and there was substantial permitted recharge capacity but, as in the past, previous commitments to other partners somewhat limited the availability of both the GSFs and the USFs to the AWBA. Additionally, the City of Tucson is interested in maximizing all available capacity for its own water storage.

For 2008, several partners that had previously stored water for the AWBA opted again not to store because they found other partners to utilize their facilities. However, given the reduction in water availability, the AWBA still has sufficient



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capacity to meet its anticipated needs. If additional supplies become available, capacity should still be available to the AWBA.

The Water Delivery Schedule (Table 2) identifies the AWBA's partners for 2008 and the amount of water scheduled to be recharged. The second column in this section identifies the AWBA's water storage permit capacities for each facility based on the facility permits. The capacity available does not always equal the storage permit capacity because the storage facility operators may have agreements with other storage partners.

**Table 2**  
**Water Delivery Schedule**  
**Calendar Year 2008**  
**(Acre-feet)**

AWBA-Recharge Sites		Permitted Capacity (AF)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>PHOENIX AMA :</b>															
<b>USF</b>	GRUSP	200,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	HIEROGLYPHIC MTNS	35,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	AGUA FRIA	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	TONOPAH DESERT	150,000	1,892	5,058	0	0	0	0	0	0	0	0	0	0	6,950
	TONOPAH Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	WEST MARIC.COMBINE		0	0	0	0	0	0	0	0	0	0	0	0	0
			6,950												
<b>GSF</b>	SRP	100,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	CHANDLER HGTS ID	3,000	0	0	0	0	0	50	50	50	50	0	0	0	200
	NEW MAGMA	54,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	QUEEN CREEK	28,000	0	0	0	0	0	0	0	1,343	2,285	2,285	1,142	1,142	8,197
	TONOPAH ID	15,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	GILA RIVER INDIAN IDD	37,520	0	0	0	0	1,402	5,711	10,475	8,365	5,373	0	0	0	31,326
			39,723												
<b>TOTAL INTRASTATE</b>			1,892	5,058	0	0	1,402	5,761	10,525	9,758	7,708	2,285	1,142	1,142	46,673
<b>TOTAL INTERSTATE</b>			0	0	0	0	0	0	0	0	0	0	0	0	0
<b>AMA TOTAL</b>			1,892	5,058	0	0	1,402	5,761	10,525	9,758	7,708	2,285	1,142	1,142	<b>46,673</b>
<b>PINAL AMA :</b>															
<b>GSF</b>	CAIDD	110,000	2,000	2,000	1,000	1,500	2,000	5,500	5,500	5,500	3,000	2,000	1,000	1,000	32,000
	CAIDD Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	HOHOKAM	55,000	840	2,730	5,380	5,017	651	1,217	2,750	8,935	6,842	3,146	2,201	2,291	42,000
	HOHOKAM Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	MSIDD	120,000	1,530	1,530	2,070	2,580	4,100	3,100	0	5,200	6,060	3,550	1,560	720	32,000
	MSIDD Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	GILA RIVER INDIAN IDD	18,480	0	0	0	0	5,000	0	0	0	0	0	0	0	5,000
			111,000												
<b>TOTAL INTRASTATE</b>			4,370	6,260	8,450	9,097	11,751	9,817	8,250	19,635	15,902	8,696	4,761	4,011	111,000
<b>TOTAL INTERSTATE</b>			0	0	0	0	0	0	0	0	0	0	0	0	0
<b>AMA TOTAL</b>			4,370	6,260	8,450	9,097	11,751	9,817	8,250	19,635	15,902	8,696	4,761	4,011	<b>111,000</b>
<b>TUCSON AMA:</b>															
<b>USF</b>	AVRA VALLEY	11,000	700	700	700	350	500	700	700	700	700	300	300	650	7,000
	PIMA MINE RD	30,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	PMR Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	LOWER SANTA CRUZ	50,000	870	0	0	0	0	2,930	3,800	3,800	3,800	2,700	1,900	3,800	23,600
	LSC Interstate		0	0	0	0	0	0	0	0	0	0	0	0	0
	CAVSARP	80,000	0	0	0	0	0	0	0	0	0	0	0	0	0
	SAVSARP	60,000	0	0	0	0	0	0	0	0	0	0	0	0	0
			30,600												
<b>GSF</b>	BKW	16,615	0	0	0	0	0	0	0	0	0	0	0	0	0
	KAI FARMS (Red Rock)	11,231	0	0	0	0	0	0	0	0	0	0	0	0	0
			0												
<b>TOTAL INTRASTATE</b>			1,570	700	700	350	500	3,630	4,500	4,500	4,500	3,000	2,200	4,450	30,600
<b>TOTAL INTERSTATE</b>			0	0	0	0	0	0	0	0	0	0	0	0	0
<b>AMA TOTAL</b>			1,570	700	700	350	500	3,630	4,500	4,500	4,500	3,000	2,200	4,450	<b>30,600</b>
<b>Outside AMA:</b>															
HARQUAHALA VALLEY ID		50,000	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>OUTSIDE TOTAL</b>			0												
<b>TOTAL INTRASTATE</b>			7,832	12,018	9,150	9,447	13,653	19,208	23,275	33,893	28,110	13,981	8,103	9,603	<b>188,273</b>
<b>TOTAL INTERSTATE</b>			0	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>			7,832	12,018	9,150	9,447	13,653	19,208	23,275	33,893	28,110	13,981	8,103	9,603	<b>188,273</b>

## **NEW FACILITIES**

One new facility, the Southern Avra Valley Storage and Recovery Project (SAVSARP), in the Tucson AMA may be used in 2008. The AWBA is in the process of drafting a new Water Storage Agreement with SAVSARP. No SAVSARP deliveries are scheduled in the 2008 Plan of Operation, yet if the Water Storage Agreement is executed in 2008, the AWBA may include deliveries to that facility if additional water becomes available.

## **INTERSTATE WATER BANKING**

The 2008 Plan of Operation does not include an interstate water banking component for the State of Nevada. Because of the reduced water supplies available to the Water Bank in 2008, it is important to complete intrastate water banking with the funds available to the AWBA before interstate water is offered. However, if water becomes available later in the year, either through precipitation events or the inability to accomplish underground storage due to maintenance or delivery problems, it may be possible to offer interstate water as part of the AWBA's deliveries.

## **RECOVERY**

Metropolitan Water District of Southern California (Metropolitan) has requested from CAWCD the recovery of 25,000 acre-feet of long-term storage credits for 2008. Pursuant to a letter agreement between Metropolitan, CAWCD, and the AWBA, those credits will be recovered and ICUA created in 2008. The letter agreement recognizes CAWCD is responsible for recovering the credits, the AWBA is responsible for creation of ICUA, and Metropolitan is responsible for the diversion of ICUA. Table 3 identifies the planned recovery schedule for 2008.

In June 2007, the CAWCD Board approved a conceptual recovery plan, which was developed by CAWCD staff through the stakeholder process. The stakeholder process will continue as CAWCD develops its final recovery plan. The recovery plan will assist the AWBA in determining appropriate locations for water storage.

**Table 3. 2008 CAWCD Recovery Schedule (Acre-feet)**

Insert Table 3

## PRICING

In August 2007, the CAWCD board adopted final water delivery rates for calendar year 2008. The rate for AWBA and other M&I Incentive recharge is \$51 per acre-foot. The delivery rate is the pumping energy rate 2 component (\$41 per acre-foot) plus 10 percent of the fixed OM&R charge (\$5.50 per acre-foot) plus a component to recover lost revenues from federal deliveries (\$5.00 per acre-foot). For 2008, the pumping energy rate 2 was calculated using the average of the actual or forecast above threshold energy rates for the previous three years.

In 2008, the AWBA maintained the cost share for the GSF partners at \$31 per acre-foot. Table 4 reflects the water delivery rate the CAP will charge the AWBA, the rate the GSF operators will pay for use of the AWBA's water and the various rates the AWBA will be charged to utilize the different USFs.

The Master Water Storage Agreement executed on July 1, 2002 describes the cost components that can be paid by the AWBA for storage at CAP facilities. On October 2, 2003, the CAWCD adopted a new policy regarding storage facility rates. Pursuant to the policy, the AWBA will pay an OM&R component for all water stored; that component is calculated by CAWCD annually for each AMA based on a rolling ten-year average. Additionally, for water stored for other than M&I firming purposes, the AWBA will pay a capital charge component. The capital charge is based on the total projected costs and projected storage of water over the lives of the facilities in the AMA and will not change annually unless there are significant changes in CAWCD's costs for recharge facilities in that AMA. There is no administration cost component in the facility cost because the AWBA pays the CAP administrative costs on an annual basis.

The rate established for interstate banking is \$217 per acre-foot, plus facility costs and facility capital costs.

**Table 4. 2008 Water and Facility Rates**

CAWCD delivery rate to AWBA	\$51 per acre-foot
Interstate rate	\$217 per acre-foot
Groundwater Savings Facility operator portion of delivery rate <sup>1</sup>	
Intrastate <sup>2</sup>	\$31 per acre-foot
Interstate	\$26 per acre-foot
Underground Storage Facility rate paid by AWBA	
Agua Fria Recharge Project (CAP) <sup>3</sup>	\$8.00 per acre-foot
Hieroglyphic Mtns. (CAP) <sup>3</sup>	\$8.00 per acre-foot
Tonopah Desert Recharge Project (CAP) <sup>3</sup>	\$8.00 per acre-foot
GRUSP	\$20.92 per acre-foot
West Maricopa Combine	\$28.00 per acre-foot
Avra Valley (CAP) <sup>4</sup>	\$15.00 per acre-foot
Lower Santa Cruz (CAP/Pima County) <sup>4</sup>	\$15.00 per acre-foot
Pima Mine Road (CAP) <sup>4</sup>	\$15.00 per acre-foot
CAVSARP (Tucson Water)	\$13.57 per acre-foot
SAVSARP (Tucson Water)	TBD

<sup>1</sup> This rate is paid directly to CAP by the GSF operators and is not available as revenue to the AWBA. The AWBA's rate for delivery of in lieu water is thus reduced to \$20/af for intrastate deliveries and \$191/af for interstate deliveries.

<sup>2</sup> The cost share portion for the Gila River Indian Irrigation District GSF is \$20/af through 2008 and reduces the AWBA rate to \$31/af for CY 2008.

<sup>3</sup> Additional capital charge of \$15 per acre-foot for interstate storage.

<sup>4</sup> Additional capital charge of \$9 per acre-foot for interstate storage.

For CAVSARP, the cost includes an administration component, a capital component and an O&M component. The cost was set by agreement dated March 3, 2003 with a 3% annual increase.

The estimated total cost of the AWBA's 2008 Plan of Operation is approximately \$5.8 million and includes the USF use fees and the CAP delivery rate minus the cost recovery from the GSF operator by the CAWCD.

## ACCOUNTING

The AWBA's enabling legislation required the development of an accounting system that allows the tracking of all long-term storage credits accrued by the AWBA and the funding sources from which they were developed. The ADWR has established accounts that track both credits and funds.

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Table 5 provides estimates of the funds available to be utilized by the AWBA including any funds carried over from previous years and an estimate of funds to be collected during the year, the funds to be utilized and the entity that holds the funds, and the credits that will accrue to those accounts based on the 2008 Plan.

**Table 5. Funding for 2008 Annual Plan of Operation**

	Funds Available (\$)		Funds Utilized (\$)		Credits (AF)
	AWBA	CAWCD	AWBA	CAWCD	
<b>Withdrawal Fees</b>					
Phoenix AMA	\$1,700,000	-	\$1,549,000	-	42,940
Tucson AMA	\$500,000	-	\$500,000	-	7,050
Pinal AMA	\$1,200,000	-	\$1,200,000	-	52,670
<b>Four Cent Tax</b>					
Phoenix AMA	\$0	\$67,100,000	\$0	\$0	0
Tucson AMA	\$0	\$5,725,000 <sup>1</sup>	\$0	\$0	0
Pinal AMA	\$0	\$1,255,000	\$0	\$1,075,000	49,450
<b>Other</b>					
<b>General</b>	\$0				
Phoenix AMA		-	\$0	-	0
Tucson AMA		-	\$0	-	0
Pinal AMA		-	\$0	-	0
<b>State Indian Firming</b>	\$13,500,000				
Phoenix AMA		-	\$0	-	0
Tucson AMA		-	\$1,500,000	-	21,110
Pinal AMA		-	\$0	-	0
<b>Gifts, Grants, Donations</b>					
Nevada:	\$8,000,000 <sup>2</sup>				
Phoenix AMA		-	\$0		
Tucson AMA		-	\$0		
Pinal AMA		-	\$0		
<b>Interstate Banking</b>					
Nevada	\$13,655,000		\$0		0
California	(not applicable)				
	<b>Total Funds Available</b>		<b>Total Funds Expended</b>		<b>Credits</b>
	\$112,635,000		\$5,824,000		173,220

<sup>1</sup> Includes \$970,209 in CAWCD's capital charge recovery for costs of construction of state demonstration projects when facilities are used for interstate purposes and by entities that do not pay the 4¢ ad valorem tax: 2004-2006 actual, 2007 estimated based on scheduled deliveries.

<sup>2</sup> Assumes Secretary will issue the Record of Decision (ROD) on Colorado River Operations and that it is consistent with Arizona shortage sharing agreements and recommendations.

The 2008 Plan was developed expending all available withdrawal fees, all carryover from previous years in the Maricopa County *ad valorem* account, and requires utilization of some of the CAP funds, as well.

Table 6 provides an estimate of the AWBA funds expended and the credits that have accrued to the various accounts based on the AWBA's recharge activities since inception.

**Table 6. Cumulative Totals of Long-term Storage Credits 1997-2007**

FUNDS		CREDITS <sup>1</sup>	
	EXPENDED	AMOUNT (AF)	LOCATION
<b>Withdrawal Fee</b>			
Phoenix AMA	\$13,013,901	206,396	Phoenix AMA
Pinal AMA	\$11,161,067	322,766	Pinal AMA
Tucson AMA	\$6,031,355	83,617	Tucson AMA
<b>Four Cent Tax</b>			
Maricopa County	\$57,783,548	1,075,789	Phoenix AMA
Pinal County	\$3,609,108	116,231	Pinal AMA
Pima County	\$18,013,866	243,917	Tucson AMA
<b>Other</b>			
General Fund	\$11,100,865	403,830	
	\$1,522,115	42,316	Phoenix AMA
	\$6,394,964	306,968 <sup>2</sup>	Pinal AMA
	\$3,183,786	54,546	Tucson AMA
<b>Interstate</b>			
California	(not applicable)		
Nevada	\$96,399,272	529,096	
<b>TOTAL</b>	<b>\$217,112,982</b>	<b>2,981,642</b>	

<sup>1</sup> Actual credits used for 1997-2006; credits estimated for 2007

<sup>2</sup> 230,280 AF of credits reserved pursuant to contract dated February 2, 2005 with Mohave County Water Authority

## PUBLIC REVIEW AND COMMENT

The AWBA staff held meetings with the GUACs for the Phoenix, Pinal and Tucson AMAs as required by statute. The Plan was distributed to the public and was posted on the AWBA web page for public review and comment.

### Phoenix GUAC

In general, the GUAC supported the Plan and had no requests for changes to it. There were questions concerning the increased water demand, pricing for in-lieu deliveries, and Indian firming.

Pinal GUAC

The GUAC supported the Plan and had no requests for changes to it. Favorable comments were received on the progress made by the Water Bank and overall benefits the State is receiving from AWBA activities.

Tucson GUAC

General discussion regarding the Plan included: changes in AWBA storage at facilities and overall storage capacity available to the AWBA. There were questions concerning the increased water demand and its relationship to commodity markets and incentive water pricing.